We claim:

1. A method for modulating the migration of neural progenitor cells comprising exposing the cells to FGF-2 and a VEGFR-2 ligand.

2. The method of claim 1, wherein the cells are exposed to the FGF-2 prior to exposure to the VEGFR-2 ligand.

3. The method of claim 1, wherein the VEGFR-2 ligand is selected from the group consisting of VEGF, VEGF-E, and VEGF-C/$D_{\Delta N \Delta C}$.

4. A method for treating a mammal having a disorder involving loss or injury of neural cells comprising exposing the mammal to a VEGFR-2 ligand and FGF-2 to stimulate migration of neural progenitor cells to the site of neural cell loss or injury.

5. The method of claim 4, wherein exposing the mammal to a VEGFR-2 ligand comprises administering a VEGFR-2 ligand to the mammal.

6. The method of claim 4, wherein the VEGFR-2 ligand is selected from the group consisting of VEGF, VEGF-E, and VEGF-C/$D_{\Delta N \Delta C}$.

7. The method of claim 4, wherein the FGF-2, the VEGFR-2 ligand, or both are administered to the site of neural cell loss or injury.

8. The method of claim 4, wherein the neural progenitor cells are transplanted into the mammal.

9. The method of claim 8, wherein the cells express VEGFR-1 and VEGFR-2.

10. The method of claim 8, wherein the cells do not express PSA-NCAM, doublecortin, NeuN, NG2, A2B5, von Willebrand factor, RECA-1, or any combination thereof.

11. The method of claim 4, wherein the disorder involving loss or injury of neural cells is brain injury.

12. The method of claim 11, wherein the brain injury is produced by head trauma, stroke, anoxia, or ischemia.

13. The method of claim 4, wherein the FGF-2 is associated with a biocompatible matrix.

14. The method of claim 4, wherein the VEGFR-2 ligand is associated with a biocompatible matrix.

15. A method for treating a mammal having a neural tissue site with a deficient neuronal population comprising exposing the mammal to a VEGFR-2 ligand in the presence of FGF-2 to stimulate migration of neural progenitor cells to the neural tissue site.

16. The method of claim 15, wherein exposing the mammal to a VEGFR-2 ligand comprises administering a VEGFR-2 ligand to the mammal.

17. The method of claim 15, wherein the VEGFR-2 ligand is selected from the group consisting of VEGF, VEGF-E, and VEGF-C/$D_{\Delta N \Delta C}$.

18. A method for modulating the migration of neural progenitor cells comprising exposing the cells to a VEGFR-2 ligand and a compound capable of increasing the expression of VEGFR-2 on the cells.

19. The method of claim 18, wherein the compound is FGF-2.

20. A composition comprising a biocompatible matrix comprising FGF-2.

21. The composition of claim 20, wherein the biocompatible matrix further comprises a VEGFR-2 ligand.

22. The composition of claim 20, further comprising neural progenitor cells.

23. The composition of claim 22, wherein the cells express VEGFR-1 and VEGFR-2.

24. The composition of claim 22, wherein the cells do not express PSA-NCAM, doublecortin, NeuN, NG2, A2B5, von Willebrand factor, RECA-1, or any combination thereof.

25. A pharmaceutical composition comprising a VEGFR-2 ligand, FGF-2 and a carrier.

26. The composition of claim 25, further comprising neural progenitor cells.